

ABSTRACT OF THE DISCLOSURE

1 A solid-state image pickup apparatus capable of performing,  
for instance, AE control by means of an image signal containing  
all colors used for color separation in photosensitive cells  
5 arranged in a honeycomb-like structure, and signal reading  
out method therefor. A digital still camera supplies a signal  
in a mode set by a mode setting section to a system control  
section. Upon receiving the signal, the system control section  
controls a drive signal generation section to generate a drive  
10 signal. Incident lights are supplied onto an image pickup  
section through color separation filters having filter segments  
of identical colors arranged in a column direction. The image  
pickup section photoelectrically converts the lights incident  
to the respective photosensitive cells. A drive signal  
15 generated by the drive signal generation section according  
to the specified mode is supplied to a signal reading out gate,  
so that a transfer for the signal charges is performed. In  
this case, signals for all the colors are read out in response  
to the drive signal in compliance with the color filter  
20 arrangement of the color separation filters. The signals read  
out are used by AF and AE adjustment sections for appropriate  
controls.